## GENERAL NOTES

- Fasteners shall be high strength bolts (AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or Type 2 in painted areas). Bolts <sup>3</sup><sub>4</sub>" \$\phi\$, open holes <sup>15</sup><sub>16</sub>" \$\phi\$, unless otherwise noted.
- 2. Calculated weight of Structural Steel = Grade 50=128,168 Lbs.
  Grade 36=34,494 Lbs.
- 3. Field welding of construction accessories will not be permitted to beams or
- 4. Anchor bolts shall be set before bolting diaphragms over supports.
- 5. The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
- 6. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2.
- 7. Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- 8. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- 9. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $|_{g}$  inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $|_{g}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two  $|_{g}$ " adjusting shims shall be provided for each bearing and placed as detailed.
- 10. Bridge Seat Sealer shall be applied to the seat area of both abutments.
- 11. All construction joints shall be bonded.
- 12. The roadway signs that hang from each fascia beam below the bridge shall be removed and salvaged prior to removal of the superstructure and reinstalled once the new beams are set.
- 13. All new structural steel shall be galvanized. The fascia and underside of the exterior beams and their associated splice plates shall be painted with the acrylic system. The color of the final finish coat shall be Reddish Brown, Munsell No. 2.5 YR 3/4. See Special Provision for "Hot Dip Galvanizing for Structural Steel".
- 14. The existing structural steel coating contains lead. The contractors shall take appropriate precautions to deal with the presence of lead on this project.
- 15. The existing restricted clearances at the structure must not be reduced while the tracks are in service.

## INDEX OF SHEETS

- SA-1 General Plan & Elevation
- SA-2 General Notes & Quantities
- SA-3 Cantilever Forming Brackets
- SA-4 Top of Slab Elevations I
- SA-5 Top of Slab Elevations II
- SA-6 Top of Slab Elevations III
  SA-7 Deck Reinforcement Plan & Cross Section
- SA-8 Deck Details
- SA-9 Concrete Barrier Details
- SA-10 Framing Plan & Beam Elevation
- SA-11 Diaphragm & Splice Details
- SA-12 Bearing Details I SA-13 Bearing Details II
- SA-14 Bridge Joint System Expansion
- SA-15 Bridge Joint System Expansion (Alternate)
- SA-16 Anchor Bolt Details for Bearings
- SA-17 Limits of Removal
- SA-18 West Abutment Removals & Repairs
- SA-19 East Abutment Removals & Repairs
  SA-20 Abutment Reconstruction Details
- SA-21 Pier Repairs
- SA-22 Bar Splicer Assembly Details
- SA-23 Bridge Approach Pavement (Special)

## TOTAL BILL OF MATERIAL

| NUMBER | ITEM   | UNIT    | SUPER. | SUB.  | TOTAL |
|--------|--|---------|--------|-------|-------|
| 1      | Protective Coat  | Sq. Yd. | 782    |       | 782   |
| 2      | Bridge Approach Pavement, Special                              | Sa. Yd. | 212    |       | 212   |
| 3      | Approach Slab Removal  | Sq. Yd. | 84     |       | 84    |
| 4 .    | Removal of Existing Superstructures No. 1                      | Each    | 1      |       | 1     |
| 5      | Concrete Removal   | Cu. Yd. |        | 15.7  | 15.7  |
| 6      | Concrete Structures  | Cu. Yd. |        | 10.8  | 10.8  |
| 7      | Concrete Superstructures                                       | Cu. Yd. | 181.3  |       | 181.3 |
| 8      | Bridae Deck Grooving   | Sg. Yd. | 488    |       | 488   |
| 9      | Elastomeric Bearing Assembly, Type I                           | Each    | 20     |       | 20    |
| 10     | Elastomeric Bearing Assembly, Type II                          | Each    | 20     |       | 20    |
| 11     | Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. |        | 212   | 212   |
| 12     | Stud Shear Connectors  | Each    | 3,300  |       | 3,300 |
| 13     | Reinforcement Bars, Epoxy Coated                               | Lb.     | 44,638 | 1,847 | 46,48 |
| 14     | Name Plates  | Each    | 1      |       | 1     |
| 15     | Bridge Seat Sealer   | Sq. Ft. |        | 157   | 157   |
| 16     | Epoxy Crack Sealing  | Foot    |        | 106   | 106   |
| 17     | Bridge Joint System (Expansion), 1"                            | Foot    | 40     |       | 40    |
| 18     | Bridge Joint System (Expansion), 15/8"                         | Foot    | 40     |       | 40    |
| 19     | Furnishing and Erecting Structural Steel, Bridge No.1          | L. Sum  | 1      |       | 1     |
| 20     | Concrete Barrier Wall (Special)                                | Cu. Yd. | 29.7   |       | 29.7  |
| 21     | Bar Splicers   | Each    |        | 60    | 60    |
| 22     | Protective Shield  | Sq. Yd. |        | 690   | 690   |

<sup>\*-</sup>Special Provisions

| F.A<br>RTE. | SECTION               | COUNTY      | TOTAL   | SHEET<br>NO. |  |
|-------------|-----------------------|-------------|---------|--------------|--|
|             | 00-00094-03-BR        | COOK        | 69      |              |  |
| STA.        | Т                     | O STA.      |         |              |  |
| FED. RO     | AD DIST. NO. 1 ILLING | IS FED. AID | PROJECT |              |  |
| Sheer       | SA-2 of SA            | -23 CONT    | RACT 8  | 3850         |  |

|                   |  | CG                                       | CONSULT | rba Group,<br>ing engineees<br>th cumberland avenue : |         | 1658 :: (773) 775-4009 |     |
|-------------------|--|--|---------|---|---------|------------------------|-----|
| REVISIONS<br>NAME |  |  |         |   |         |                        |     |
|                   |  | PINE STREET OVER THE UNION PACIFIC R.R.  |         |   |         |                        |     |
|                   |  | R.R. MILE POST 16.89 KENOSHA SUBDIVISION |         |   |         |                        |     |
|                   |  | (  | COOK    | COUNTY  |         | . 101+09.              | 96  |
|                   |  |  |         | STRUCTURE   | NO. 016 | -8259                  |     |
|                   |  | SCALE:                                   | NONE    |   |         | DRAWN BY:              | RCD |
|                   |  | DATE:                                    | JUNE    | 2006  |         | DESIGN BY:             |     |
| L                 |  | FILE:                                    | 3278    |   |         | CHECKED BY:            | SCD |